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US Army Exhibits Successful Plug Power Fuel Cell

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The first successful fuel cell is now in operation at Hawaii's historic Schofield Barracks Fire Station. Installed by **LOGANEnergy Corp.** (Roswell, GA) under a **US Army Corps of Engineer Construction Engineering Research Laboratory** demonstration program, the US Army Garrison, Hawaii, will be able to experience the benefits of fuel cell technology for one year.

The fuel cell, manufactured by **Plug Power Inc.** (Latham, NY), a developer of fuel cell systems for use telecommunications and uninterruptible power supply applications, uses a proton-exchange membrane to strip hydrogen from high-grade propane from the Gas Company. The hydrogen is combined with oxygen from air to produce electricity, and heat from the reaction is recovered to make hot water. Low emissions and water are byproducts of the process. About the size of two refrigerators and just as quiet, the fuel cell makes enough power and hot water for a large family residence.

Up to 5 kW of electricity is produced by the fuel cell and fed into the Schofield electrical distribution system. In the event of a power outage, the fuel cell disconnects from the system and dedicates power to life safety circuits in the fire station. The transfer is instantaneous and transparent to the fire station. Because generation is on-site and waste heat can be used, the fuel cell offers additional reliability, energy efficiencies, and low emissions not possible with central power plants.

Mike Binder from the research laboratory and Sam Logan of Logan Energy visited Hawaii to certify fuel cell installations at a housing unit on Marine Corp Base Hawaii, Kaneohe Bay, in a Navy maintenance building and at the Schofield Fire Station. Logan Energy noted, that out of all the applications, the Schofield site fully showcases the benefits of the technology by using 100 percent of the waste heat and providing emergency power to the critical functions of an essential facility. Logan Energy also noted that the Army site has been the most trouble-free, and Logan is remotely monitoring its operations and logging data to evaluate fuel cell applications and to identify improvements.

See below for link to story.